



PATENT  
Customer No. 22,852  
Attorney Docket No. 03715.0151

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
Philippe SANSONETTI et al.	)	Group Art Unit: 1654
	)	
Serial No.: 10/551,040	)	Examiner: Jennifer I. Harle
	)	
Filed: September 27, 2005	)	
	)	Confirmation No.: 4657
For: A METHOD FOR MODULATING	)	
NOD1 ACTIVITY, USE OF A MTP	)	
RELATED MOLECULE FOR	)	
MODULATING NOD1 ACTIVITY,	)	
AND THERAPEUTIC	)	
APPLICATIONS THEREOF	)	

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**RESPONSE TO RESTRICTION REQUIREMENT**

In a restriction requirement dated October 12, 2007, the Examiner required  
restriction under 35 U.S.C. § 121 between:

- |           |  |
|-----------|--|
| Group I   | Claims 1-5, drawn to a method for modulating NOD1 activity comprising expressing NOD1 and contacting with a molecule related to MTP;       |
| Group II  | Claims 6-8, drawn to a method for modulating inflammation and/or apoptosis comprising administering a molecule related to MTP;             |
| Group III | Claims 9-14, 17, and 25, drawn to a molecule related to MTP and compositions thereof;  |
| Group IV  | Claim 15, drawn to a method for enhancing the immune response of a host comprising administering an antigen and a compound from Group III; |

- Group V Claims 16 and 19, drawn to a method for providing an immune response in a host comprising administering a composition from Group III;
- Group VI Claim 18, drawn to method of vaccination comprising administering a composition from Group III;
- Group VII Claim 20, drawn to a method for detecting the dysfunction of a molecule of the inflammatory and/or apoptosis pathway in which NOD1 is involved including use of MPT or agonist thereof;
- Group VIII Claim 21, drawn to method for screening a molecule, which is capable of modulating an inflammatory and/or apoptotic response obtained after direct or indirect interaction between NOD1 and MPT;
- Group IX Claim 22, drawn to a molecule identified by the screening process of claim 21, would include a molecule related to MTP;
- Group X Claim 23, drawn to method for modulation of inflammation and/or apoptosis comprising administering a molecule identified by the screening process of Group VIII;
- Group XI Claim 24, drawn to a complex of NOD1 and MTP;
- Group XII Claims 26-29, drawn to method for detecting peptidoglycan;
- Group XIII Claims 30-33, drawn to method for the detection of peptidoglycan in a sample and optionally determining the Gram-negative or Gram-positive bacterial origin of said peptidoglycan, includes MTP; and
- Group XIV Claim 34, drawn to method for screening for a molecule that modulates interaction between Gram-negative bacteria peptidoglycan and NOD1 comprising contacting with NOD1.

Applicant provisionally elects to prosecute Group IV, claim 15, drawn to a method for enhancing the immune response of a host comprising administering an antigen and a compound from Group III, with traverse.

Applicant respectfully submits that claims 15, 16, 18, and 19 do not lack unity of invention. All of these claims are directed to the use of a molecule related to muramyl tripeptide (MTP) to induce an immune response. The Examiner does not allege that Uehara discloses such a use. Thus, unity of invention among Groups IV, V, and VI is present. Furthermore, Applicant respectfully asserts that it would be eminently feasible for the examiner to search and examine Groups IV, V, and VI together.

In the event that the Office refuses to withdraw the restriction requirement, Applicant submits that the claims of Groups V and VI should be rejoined with the claims of Group IV and examined in this application upon a determination that the claims of Group IV are allowable. See M.P.E.P. § 821.04.

The Office also required an election of a single species among MTP, specific molecules related to MTP, L-Ala-D-Glu-mesoDAP, specific L-Ala-D-Glu-mesoDAP biological derivatives, and specific L-Ala-D-Glu-mesoDAP peptidomimetics. Applicant elects to prosecute L-Ala-D-Glu-mesoDAP, without traverse, and submits that this species reads on claim 15.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

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Dated: December 12, 2007

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